

**Section-By-Section Analysis of H.R. 1868,
The Technology Innovation and Manufacturing Stimulation Act of 2007
April 16, 2007**

Section 1. Short title.

The Technology Innovation and Manufacturing Stimulation Act of 2007.

Title I – Authorization of Appropriations

Section 101. Scientific and Technical Research and Services (STRS).

Authorizes \$470.9 million in FY08, \$497.8 million in FY09, and \$537.6 million in FY10 for the NIST lab activities. Authorizes \$7.9 million in FY08, \$8.1 million in FY09, and \$8.3 million in FY10 for the Baldrige National Quality Award Program. Authorizes \$93.9 million in FY08, \$86.4 million in FY09, and \$49.7 million for construction and maintenance of facilities. The FY08 levels for the labs and construction are the same as the President's budget request.

Section 102. Industrial Technology Services (ITS).

Authorizes \$110 million in FY08 for the Technology Innovation Program (TIP) which replaces the Advanced Technology Program (ATP) later in the bill. Authorizes \$141.5 million in FY09 and \$150.5 million in FY10. Requires that at least \$45 million in each year be for new awards. Authorizes \$113.0 million in FY08, \$122.0 million in FY09, and \$131.8 million in FY10 for the Manufacturing Extension Partnership (MEP). Sets aside \$1 million in FY08 and \$4 million in FY09 and FY10 from the MEP funds for a competitive grant program established later in the bill.

Title II – Innovation and Technology Policy Reforms

Section 201. Institute-wide planning report.

Requires the Director of NIST to submit a 3-year NIST programmatic planning document to the Congress at the time of the budget submission the first year after enactment, and then to submit yearly updates with each new budget submission.

Section 202. Report by Visiting Committee.

Changes the reporting requirement for the Visiting Committee on Advanced Technology (VCAT) to be due 30 days after the submission of the President's budget to Congress, and requires the VCAT to comment on the NIST Director's 3-year planning document.

Section 203. Manufacturing Extension Partnership.

Establishes the MEP Advisory Board, which consists of 10 members appointed by the NIST director, serving 3-year terms. 2 members must be employed by or on advisory boards of one of the MEP Centers, and 5 others must be from small manufacturers; none can be Federal employees. The board meets no less than twice a year, and provides the NIST Director with advice on and assessments of MEP. It also comments on the NIST Director's 3-year planning document. The Board is governed by FACA (Federal Advisory Committee Act).

Allows MEP to accept funds from other Federal agencies and from the private sector.

Establishes the MEP competitive grants program for MEP Centers or consortia of Centers. The grants are peer reviewed and competitively awarded for Center(s) to conduct projects to solve new or emerging manufacturing problems. Awardees are not required to provide matching funds.

Sec. 204. Technology Innovation Program.

Repeals the existing Advanced Technology Program (ATP) statute.

- (a) Creates a new program, the "Technology Innovation Program" with the purpose of assisting businesses and universities to accelerate the development of high-risk technologies that will have a broadly-based economic impact.
- (b) Grants – Provides the Director of NIST with the authority to make grants under this program to either small or medium businesses or joint ventures. Grants of no more than \$3 million over 3 years can be made to single company which must be a small or medium business. The award may be extended at no additional cost provided there is congressional notice. The funding for a single applicant may only be used for direct costs. Grants may also be made to joint ventures (with either a small or medium business or a university as the lead of the joint venture). A joint venture grant may not exceed \$9 million over a five year period and the federal share of project is limited to no more than 50%.
- (c) Award Criteria – Provides criteria for the selection of grants based upon scientific and technological merit, the project's potential for benefits that extend beyond direct return to the applicant, the inclusion of a technical planning document, the technical competence of the project managers and the organizational structure and management plan, and an explanation of why TIP support is necessary.
- (d) External Review of Proposals – Requires the Director to consult with industry or other expert sources with no proprietary or financial interest in the project to review the need for or value of any proposal.
- (e) Intellectual Property Rights Ownership – Addresses allocation of intellectual property developed by a joint venture. Allows IP to vest to any participant as agreed to by the joint venture participants. In accordance with current law allows the Federal government to retain a license for any IP for US government use only. Makes clear that joint venture participants can license their IP.

- (f) Program Operation – Within 90 days the Director shall issue regulations for the operation of the program which include selection criteria, financial and audit procedures and dissemination of results.
- (g) Continuation of ATP Grants – This requires the TIP to continue funding for awards made under the prior Advanced Technology Program.
- (h) Coordination with Other Federal Technology Programs – Requires the Director to coordinate with other federal agencies to ensure there is no duplication of effort.
- (i) Acceptance of Funds From Other Federal Agencies – Allows other Federal agencies to provide funds to NIST to fund TIP awards.
- (j) TIP Advisory Board – Establishes in statute the TIP Advisory Board of 10 members, 7 of whom are from US industry, serving 3-year terms. None are Federal employees. The Board meets twice a year and advises on the TIP program. It also comments on the Director's 3-year planning document. The Board will be governed by FACA (Federal Advisory Committee Act).
- (k) Definition –

Eligible Company – is majority owned by US citizens or is owned by a parent company incorporated in another country provided that the company's participation is in US economic interests, which includes R&D investment in the US, and increasing US employment. Also, the country of incorporation must afford similar opportunities for US companies, and provide for effective protection of IP rights. (This is necessary under WTO rules.)

Joint Venture – includes either 2 separately owned for-profit companies and the lead must be a small or medium business or at least one small or medium business and one institution of higher education where either can be the lead. Joint ventures may include additional for-profit companies, institutions of higher education or other organizations (such as research institutes).

Sec. 205. Research Fellowships.

Raises the amount NIST can spend on research fellowships from 1% to 1.5% of the total appropriations.

Sec. 206. Collaborative Manufacturing Research Pilot Grants.

Establishes a collaborative manufacturing research pilot grant program for partnerships between (at least) one industry and one non-industry partner, with the purpose of fostering collaboration and conducting applied research on manufacturing. The award can be no more than 1/3 of the cost of the partnership, with no more than an additional 1/3 coming from other Federal sources. Selection criteria for the awards are based on the breadth of impact of the project, the novelty and scientific merit of the proposal, and the demonstrated capability of the participants. Awards are distributed among a range of industry sectors and firm sizes. NIST will run one pilot competition, funded by an extra \$10 million in the STRS budget for FY08. Awards are for 3 years.

Sec. 207. Collaborative Manufacturing Research Pilot Grants.

Establishes a program of postdoctoral fellowships and senior research fellowships at NIST in manufacturing sciences. Paid for by the increase to 1.5% of total appropriations that NIST can use for fellowships.

Sec. 208. Meetings of VCAT.

Reduces the frequency of meetings for the Visiting Committee on Advanced Technology (VCAT) from quarterly to twice annually.